



# Physics Curriculum Support Document

## Verifying Ohm's Law: Laboratory


3. Be extremely careful with all of the equipment. The resistors can get very hot. Ask if you are unsure of anything in your set up.

### COMMON SYMBOLS FOR SCHEMATIC DIAGRAMS:

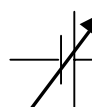
Ammeter  Resistor 

\_\_\_\_\_

Voltmeter  Variable Resistor 

\_\_\_\_\_ 

 Power Supply / Battery

 Variable Voltage Power Supply

### Questions to Guide Analysis

1. What is the purpose of the lab?
2. What was your prediction and justification for your prediction?
3. Draw and label a schematic diagram of your setup, using the symbols shown in the lab.
4. Indicate the color code for your resistor and record its numerical value (see page 1 for an example).
5. Include a data table with your data. Follow rules for data tables!
6. Include a graph of your data with a best-fit curve. Follow rules for graphs!
7. Analysis:
  - a. Include a brief written statement of the relationship shown in your graph.
    - b. Record the equation for your best-fit curve using correct symbols and units. Watch s.f.
  - c. If you eliminate the y-intercept give a justification.
8. Questions: *Answer questions using complete sentences. A person reading your answer should know what the question was from the wording of your answer!*
  - a. Clearly state the relationship you found in this lab.